

## **AMENDMENTS TO THE SPECIFICATION**

Please replace the second full paragraph on page 3, immediately beneath the heading “Disclosure of the Invention,” with the following:

In accordance with the present invention there is provided a process for the hydrometallurgical processing of manganese containing materials, the process characterised by the combination of a manganese dioxide containing feedstock and an acidic solution to form an acidic solution to be leached, and passing a volume of sulphur dioxide gas through that leach solution as the leaching agent, whereby **no sintering or roasting pre-treatment step of the feedstock is undertaken and** the levels of dithionate ion generated in the leach solution are less than about 5g/l.

Please replace the fifth full paragraph on page 4 with the following:

In accordance with present invention there is further provided a process for the production of electrolytic manganese dioxide, the process characterised by a leach of a manganese dioxide containing feedstock, **without a sintering or roasting pre-treatment step of that feedstock**, in which a volume of sulphur dioxide gas as the leaching agent is passed through an acidic solution containing manganese dioxide, the dithionate ion levels in said solution being maintained at less than about 5g/l, the resulting leach solution being processed to provide an appropriate electrolyte that is

passed to an electrowinning stage during which electrolytic manganese dioxide is deposited.

Please replace the first full paragraph on page 9 with the following:

It is envisaged that the process of the present invention, specifically as it resides in the leaching of manganese containing feed stocks to produce leach solutions with dithionate ion levels of less than 5g/l, and preferably less than 1g/l, may **by-be** applied to the processing of all types of manganese dioxide containing ores (including both high and low grade), mine tailings, fines, fumes and tailings of manganese ferro-alloy production facilities, ocean floor manganese nodules, ferromanganese nodules, wastes from zinc refinery cells and manganese dioxide contained in used or partially used alkaline or carbon zinc batteries. The leach solutions generated by reprocessing such materials in accordance with the present invention can then be purified and used in the production of EMD, EMM and other manganese chemical products.

Please replace the text of the Abstract on page 14 with the following:

A process for the hydrometallurgical processing of manganese containing materials, the process characterised by the combination of a manganese dioxide containing feedstock and an acidic solution to form an acidic solution to be leached, and passing a volume of sulphur dioxide gas through that leach solution as the leaching agent, whereby **no**

sintering or roasting pre-treatment step of the feedstock is undertaken and the levels of dithionate ion generated in the leach solution are less than about 5g/l. Also described is a process for the production of electrolytic manganese dioxide.